

## WHAT IS CLAIMED IS:

1. A system for managing communication on a network, the system comprising:
  - a first network for connecting to a data acquisition device;
  - a router connected to the first network, wherein the router is for connecting to a second network having a number of second network hosts;
  - a first network host connected to the first network;
  - a template file; and
  - a manager program for executing by a processor of the first network host to assemble first configuring instructions from the template file for configuring the router,
- 10 wherein network communication is established among the first network host, the router and the second network hosts responsive to the configuring, and the configuring does not disrupt communication on the first network between the first network host and the data acquisition device.
- 15 2. The system of claim 1, wherein the first network host has a predetermined configuration, including parameters defining a certain identity, and the configuring includes setting parameters in the router that assign the certain identity to the router, so that the network communication between the first network host and the router is established by the first network host recognizing the router identity.
- 20 3. The system of claim 2, wherein the configuring includes setting parameters in the router for a network connection between the router and the second network, so that

the network communication between the second network hosts and the router is established by the second network hosts recognizing the router identity via the network connection.

5 4. The system of claim 1, wherein the router comprises a processor, and wherein execution of the configuring instructions by the router processor automatically performs the router configuring.

10 5. The system of claim 4, wherein the system comprises second configuring instructions for executing by the router processor upon booting.

15 6. The system of claim 5, wherein the router comprises a storage unit, and the second configuring instructions include instructions stored in a configuration file on the router storage unit.

7. The system of claim 5, wherein the router comprises a reader for reading a portable storage device, and the second configuring instructions include instructions stored on an external storage device readable by the router's reader.

20 8. The system of claim 4, wherein the first configuring instructions include instructions for sending to the router from the first host via the first network for router processor executing.

9. The system of claim 8, wherein the first configuring instructions include parameters for performing a network log-in to initialize the network communication on the first network between the router and the first network host.

5 10. The system of claim 8, wherein the configuring includes configuring the first router to substitute a network address of the first router in place of a network address of the first network host for communicating from the first network host to one of the second network hosts.

10 11. The system of claim 8, wherein the configuring includes configuring the router to not send addresses of nodes in the first network to other routers.

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12. A method for managing communication on a network, the method comprising the steps of:

executing instructions by a host to assemble first configuring instructions for a router from a template file, wherein a data acquisition device, the router and the host are connected to a first network, and the data acquisition device and the first network host are capable of network communication with one another thereon, and wherein the router is connected to a second network having a number of second network hosts;

sending the first configuring instructions by the first network host via the first network to the router; and

10 executing configuring instructions by the router, including the first configuring instructions, wherein the step of executing the configuring instructions by the router comprises the step of:

configuring the router and establishing communication between the first network host and the router, wherein the configuring does not disrupt the network communication between the first network host and the data acquisition device on the first network.

15 13. The method of claim 12, wherein the first network host has a predetermined configuration, including parameters defining a certain identity, and wherein the step of executing the configuring instructions by the router comprises the step of:

20 assigning the certain identity to the router, so that the network communication between the first network host and the router is established by the first network host recognizing the router identity.

14. The method of claim 13, wherein the step of executing the configuring instructions by the router comprises the step of:

making a network connection between the router and the second network, so that the network communication between the second network hosts and the router is  
5 established by the second network hosts recognizing the router identity via the network connection.

15. The method of claim 14, wherein certain ones of the configuring instructions include instructions for executing by the router upon the router booting, and the step of  
10 executing the configuring instructions by the router comprises executing the certain ones of the configuring instructions.

16. The method of claim 15, wherein the router has a storage unit, and the certain ones of the configuring instructions include instructions stored in a configuration file on  
15 the router storage unit.

17. The method of claim 15, wherein the router has a reader, and the certain ones of the configuring instructions include instructions stored on an external storage device readable by the router's reader.

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18. The method of claim 15, wherein the step of executing the configuring instructions by the router comprises the step of:

logging in to the router to initialize the network communication on the first network between the router and the first network host.

19. The method of claim 18, wherein the step of executing the configuring  
5 instructions by the router comprises the step of:

configuring the router to substitute a network address of the router in place of a network address of the first network host for communicating from the first network host to one of the second network hosts.

10 20. The method of claim 19, wherein the step of executing the configuring  
instructions by the router comprises the step of:

configuring the first router to not send addresses of nodes in the first network to other routers.

21. A computer program product in a computer readable media for use in a data processing system, for managing communication on a network, comprising:

user interface instructions for generating a user interface including context sensitive windows for user input to setup and select network connections;

5 manager engine instructions for responding to a user selection received via the user interface;

configuration module instructions for assembling configuring instructions to send to a router; and

communications module instructions for supplying communications protocols and  
10 handling the sending of the configuring instructions to the router, wherein the computer program product is for executing on a host in a first network, the network having a router and a data acquisition device connected thereto, the data acquisition device and the first network host being capable of network communication with one another thereon, and the configuring instructions include instructions for configuring the router and establishing  
15 communication between the first network host and the router, wherein the configuring does not disrupt the network communication between the first network host and the data acquisition device on the first network.

22. The computer program product of claim 21, wherein the first network host

20 has a predetermined configuration, including parameters defining a certain identity, and wherein the configuring instructions include instructions for assigning a certain identity to the router, so that the network communication between the first network host and the router is established by the first network host recognizing the router identity.

23. The computer program product of claim 22, wherein the configuring instructions include instructions for making a network connection between the router and the second network, so that the network communication between the second network hosts and the router is established by the second network hosts recognizing the router identity via the network connection.

5 24. The computer program product of claim 22, wherein the configuring instructions include instructions for executing by the router upon the router booting.

10 25. The computer program product of claim 22, wherein the configuring instructions include instructions for logging in to the router to initialize the network communication on the first network between the router and the first network host.

15 26. The computer program product of claim 22, wherein the configuring instructions include instructions for configuring the router to substitute a network address of the router in place of a network address of the first network host for communicating from the first network host to one of the second network hosts.

20 27. The computer program product of claim 22, wherein the configuring instructions include instructions for configuring the first router to not send addresses of nodes in the first network to other routers.

28. The computer program product of claim 22, wherein the manager engine instructions include instructions for locating a template file responsive to the user selection, and wherein the configuration module instructions include instructions for assembling the configuring instructions from the template file.

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29. The computer program product of claim 21, wherein the communications module instructions are also for receiving error messages and notice of router events from the router, and the computer program product further comprises:

state and status module instructions for capturing the error messages and router

10 events.

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